

What is claimed is:

1. A metering pump for delivering a medium, having a plurality of pump components, wherein all of the pump components are formed as plastic injection molded parts.

2. The metering pump as claimed in claim 1, having a bellows-type spring of flexible material which is axially compliant along the pump axis, the hollow space of which spring is designed as a pump chamber, wherein the bellows-type spring is designed as a tubular valve section in a discharge region toward a metering head, said tubular valve section interacting with a corresponding valve seat section of a metering head of the metering pump.

3. The metering pump as claimed in claim 1, wherein the tubular valve section is provided in the manner of a cup spring with an annular constriction.

4. The metering pump as claimed in claim 1, wherein the bellows-type spring has a sliding guide section which is mounted in a pump housing in a manner such that it is able to travel.

5. The metering pump as claimed in claim 2, wherein the metering head has a guide connection which engages axially over the outside of the discharge region of the bellows-type spring and sits in an axially moveable manner on the discharge region of the bellows-type spring.

6. The metering pump as claimed in claim 2, wherein the guide connection of the metering head and the discharge region of the bellows-type spring are guided in a torsionally secured manner with respect to each other.

7. The metering pump as claimed in claim 6, wherein an axially aligned finger-tight toothing is provided as the torsional securing means.

8. The metering pump as claimed in claim 2, wherein the bellows-type spring is held frictionally by an intake region in the pump housing.

9. A method for producing a plurality of metering pumps from plastic injection molded parts which are assembled to form the metering pumps, wherein in each case all of the pump components for at least one metering pump in each case are manufactured in a common injection cycle in each case, an assembly sequence is predetermined for the pump components, the pump components following one another in the assembly sequence are fitted in time with the injection cycles, the number of assembly steps corresponding to the number of injection cycles for producing a corresponding number of metering pumps.

10. A device for producing a metering pump from plastic injection molded parts, comprising an injection molding die for producing the injection molded parts, wherein an assembly platform which has

assembly holders for the injection molded parts is provided, the assembly platform being able to be delivered to the injection molding die in such a manner that the injection molded parts can be inserted from the injection molding die into the assembly holders of the assembly platform by a plugging-in process, and, after the insertion of the injection molded parts, the assembly platform can be moved away again from the injection molding die.

11. The device as claimed in claim 10, wherein the assembly platform can be changed in its delivery position relative to the injection molding die in such a manner that, for each injection cycle, the assembly holders can be delivered in a changed position relative to positions in the injection molding die for the injection molded parts and hold the injection molded parts respectively following in the assembly sequence at the positions at which injection molded parts of the at least one preceding assembly step are already positioned.

12. The device as claimed in claim 10, wherein means for moving the injection molded parts out of the injection molding die into the assembly holders are provided.

13. The device as claimed in claim 12, wherein means for plugging the injection molded parts together in the assembly sequence are provided in the assembly holders.

14. The device as claimed in claim 10, wherein means for removing the ready-assembled metering pumps from the assembly platform are provided.

15. The device as claimed in claim 10, wherein the assembly platform can be moved into the injection molding die and can be moved out of the latter by means of a slide-type guide.

16. The device as claimed in claim 11, wherein the assembly platform can be rotated about a central axis of rotation and can be locked in different rotational positions.